



July 6, 2005

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U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Serial No. 05-432
KPS/LIC/GR: RO
Docket No. 50-305
License No. DPR-43

DOMINION ENERGY KEWAUNEE, INC.
KEWAUNEE POWER STATION
GENERIC LETTER 2004-02: POTENTIAL IMPACT OF DEBRIS BLOCKAGE ON
EMERGENCY RECIRCULATION DURING DESIGN-BASIS ACCIDENTS AT
PRESSURIZED-WATER REACTORS – RESPONSE TO REQUEST FOR
ADDITIONAL INFORMATION

By letter dated March 7, 2005, Nuclear Management Company, LLC (NMC) provided the 90-day response to Generic Letter (GL) 2004-02. By letter dated May 27, 2005, NRC requested additional information regarding the 90-day response.

Attachment 1 contains the response to the request for additional information.

If you have any further questions, please contact Gerald Riste at (920) 388-8424.

I declare under penalty of perjury that the foregoing is true and correct. Executed on July 6, 2005.

Very truly yours,

A handwritten signature in black ink, appearing to read "m. gaffney", written in a cursive style.

Michael G. Gaffney
Site Vice President, Kewaunee Power Station

Attachment

A116

Commitments made by this letter:

Kewaunee's response to Generic Letter 2004-02 due on September 1, 2005, will address chemical effects and downstream effects evaluations for resolution of GSI-191.

cc : Mr. J. L. Caldwell
Administrator, Region
U. S. Nuclear Regulatory Commission
Region III
2443 Warrenville Road
Suite 210
Lisle, Illinois 60532-4352

Mr. C. F. Lyon
Project Manager
U.S. Nuclear Regulatory Commission
Mail Stop 8 H4A
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

Mr. S. C. Burton
NRC Senior Resident Inspector
Kewaunee Power Station

Public Service Commission of Wisconsin
Electric Division
P.O. Box 7854
Madison, WI 53707

ATTACHMENT 1

**GENERIC LETTER 2004-02: POTENTIAL IMPACT OF DEBRIS BLOCKAGE
ON EMERGENCY RECIRCULATION DURING DESIGN-BASIS ACCIDENTS AT
PRESSURIZED-WATER REACTORS – RESPONSE TO REQUEST FOR
ADDITIONAL INFORMATION**

DOMINION ENERGY KEWAUNEE, INC.
KEWAUNEE POWER STATION

**GENERIC LETTER 2004-02
REQUEST FOR ADDITIONAL INFORMATION
90-DAY RESPONSE TO GL 2004-02
CONTAINMENT SUMP BLOCKAGE GSI-191**

NRC REQUEST FOR ADDITIONAL INFORMATION:

1. In your 90-day response to GL 2004-02, you indicated that you intend to use future test results, industry guidance, and NRC guidance to account for chemical precipitants in your evaluation and their availability will impact the schedule for performing an evaluation. The cooperative NRC-EPRI tests in progress at the University of New Mexico are designed to determine if chemical effects occur, but are not designed to measure head loss associated with any chemical effects. The staff notes that some chemical effects have been observed in the initial three tests.
2. In your 90-day response to GL 2004-02, you indicated that you intend to use industry owners' group guidance and component manufacturer data to evaluate long-term performance degradation of downstream susceptible components caused by debris-laden fluid and their availability will impact the schedule for performing an evaluation.

For both of these issues, you state their evaluation may occur after the September 1, 2005, response due date, depending on the schedule for testing and availability of industry guidance. This is contrary to the information requested in GL 2004-02, that chemical and downstream effects be addressed in the September 1, 2005 response. This delay is also contrary to the NRC staff's position that there is sufficient reason to address sump vulnerability that the NRC staff is not going to wait for additional test results, and that the September response will be incomplete if the evaluation is incomplete, the design is not complete or there is no schedule for upgrades. In that light, please discuss your plans and schedule for evaluating chemical effects and the long-term downstream effects. Discuss any plans for performing testing to support your evaluation of these effects.

RESPONSE:

NMC provided a 90-day fleet response to Generic Letter 2004-02 based on information available at that time. Subsequent to submitting the 90-day response, additional information has become available pertaining to chemical effects and evaluation of downstream effects.

Recent cooperative NRC-EPRI chemical testing confirms that precipitant can be formed in the post-LOCA containment environment. The effects of this precipitant on screen head loss has not been quantified nor has a methodology been formulated for determining this component of the total head loss. However, Kewaunee will perform a

chemical effects evaluation to address sump screen head loss during post-LOCA recirculation. The evaluation will determine if the NRC-EPRI tests bound site-specific post-LOCA parameters, and will ensure sufficient head loss margin exists for chemical effects in the recirculation sump strainer design. Kewaunee will perform this evaluation to support the September 1, 2005, response to Generic Letter 2004-02.

The guidance document for the evaluation of downstream effects, WCAP-16406-P, "Evaluation of Downstream Sump Debris Effects in Support of GSI-191," is currently in draft form. Kewaunee will perform a downstream effects evaluation using the methodology outlined in Draft WCAP-16406-P. The evaluation for downstream effects is currently being performed and will support the September 1, 2005, response to Generic Letter 2004-02. Should the parameters applied in the evaluation be affected by the detailed design of the new containment sump recirculation strainer, Kewaunee will provide supplemental information to the NRC. Kewaunee will also provide a supplemental response if changes are made to the downstream effects evaluation methodology that affect Kewaunee's evaluation.

At this time, there are no plans to perform site-specific testing in support of the downstream effects and chemical effects evaluations; however, the need for testing will be evaluated during the detailed design phase for the replacement recirculation sump strainer.